

GRUM PEER RSP

03/15/95

FS Response to draft Peer Review Team comments regarding Grumman/NWIRP facility, Bethpage, New York:

1. Comment: There is only limited data regarding the efficacy and applicability of some of the proposed technology.

Response: Soil Vapor Extraction (SVE) is a proven technology. As discussed on page 1-6 of the Feasibility Study, coarse sands and gravels lie beneath the site. This type of soil is more amenable to SVE than would a clay soil.

2. Comment: Why was the TCLP criteria used to estimate the extent of metals that require excavation and treatment, rather than using more sophisticated modelling based on soil concentrations levels? Commenter recommended against using TCLP criteria for this purpose.

Double-check this. Response: The TCLP values for the metals of concern at this facility, are more stringent than the values listed in the NYSDEC Soil Cleanup TAGM, probably because the TCLP leachate is an acid, which is more aggressive than the water found in normal site conditions. The Navy's rationale probably was that the arsenic-contaminated soil will need to undergo the TCLP test after it is treated, to determine whether it can be placed in a municipal landfill. It would be more consistent to use the TCLP for sampling both before and after treatment of the metals. Also,

3. a. Comment: Additional information regarding the extent to which residual VOC concentrations are "not expected" to leach to groundwater should also be provided.

Response: It is likely that there will be some leaching of contaminants to the groundwater, but at levels significantly below groundwater standards. However, VOCs are not expected to contaminate groundwater at levels which exceed standards. This conclusion is based on the groundwater-derived soil cleanup goals, which are based on calculations from Appendix B of the FS. In addition, the majority of the VOCs which enter the groundwater are expected to be picked up by the proposed groundwater treatment system, which will be discussed in a future ROD.

b. Comment: It is unclear whether sufficient characterization of soils has been conducted in order to determine whether vapor extraction will remove significant volumes of VOCs from soils and/or achieve applicable criteria.

Response: Please refer to the response to Comment #1, above.



c. Comment: If the Soil Vapor Extraction system doesn't work, they should try something else.

Response: I agree, but they do expect that this proven technology should work for this soil type.

d. Comment: Changes in groundwater quality should be monitored over time.

Response: This will be done during the GW monitoring phase, which will be the next phase of remediation which is being planned.

4. Comment: The VOCs should be captured during air-stripping, to prevent their release into the atmosphere.

Response: The NYSDEC Superfund project manager told me that he will insist that the VOCs from air-stripping are treated before any release into the atmosphere. Also, the Navy will need to get a NYSDEC Air Permit for the air-stripper.

However, the BPWD #5 treatment system will not include treatment of the off-gas.

5. Comment: Reviewer thinks it was not prudent to cover the PCB-contaminated soil with 8 to 10 inches of soils, on an interim basis, to protect human health. He thinks that it may have given a false sense of security, if additional cleanup is not done.

Response: This action was done in July 1993 as an interim measure to protect workers from fugitive dust and dermal contact. It was an effective interim measure. The contaminated soil will be excavated and incinerated as part of the remediation of PCB-contaminated soils at this facility.

6. Comment: The treatment methods identified for treating the contaminated soils are consistent with the type of methods used to treat the contaminants identified at the site. At this point in time, there is not enough information given in the PRAP to review the project in any type of detail. This is consistent with the CERCLA process in which detailed information needed to implement the proposed alternative is usually presented in the Remedial Design stage.

Response: Additional information regarding alternatives considered, and calculations of the amount of soil requiring each of the proposed treatment alternatives, is included in the Feasibility Study Report, dated March 1994, which was referenced in the summary sheet accompanying the PRAP.

7. If two or more of the contaminants identified at the site are present in the same soil matrix, it may be difficult to use any of the treatment methods described alone to separately treat the soil contamination. A combined treatment system may be needed to

could this be added into the ROD.

After discussing this with the Peer Review Team members, I discussed this with the NYSDEC Superfund project manager, who has the regulatory lead for this.

treat the soil which as an example, incorporates thermal treatment and chemical fixation for PCB and metals contaminated soil.

Response: Site 1, the former Drum Marshalling Area, is the only area where metals (arsenic) will require treatment. Soil boring data shown on Appendix B of the Feasibility Study indicate that there are not any PCBs at the area where unacceptable levels of arsenic were found, and vice versa. More precisely, soil boring SB119 had a concentration of 3380 ppb, but no hits for any Aroclor compounds. Whereas, soil boring SS300 had a hit for arsenic of only 14.9 ppb (which is lower than the action level for arsenic), but had a combined concentration of 1470 ppb for Aroclor 1248 and Aroclor 1254. Therefore, it does not appear that the presence of any of the compounds would interfere with the treatment of the other compounds. The reason for the presence of different types of contaminants at different areas within Site 1 probably is due to its past use as a drum marshalling area, where different types of compounds were stored in different areas.

several
orders of
magnitude

5400 ppb

8. The cost for incineration of soil appears quite high. Are these values correct?

Response: I agree that the cost is high. The Navy agrees with this proposed treatment method.